

An Attractant for *Zerene eurydice* (Pieridae)?

During the summer of 1981, while living in an apartment near the campus of California Polytechnic State University, San Luis Obispo, I observed unusual behavior of *Zerene eurydice* (Boisduval) toward a hedge of the cultivated shrub called xylosma, *Xylosma congestum* (Lour) Merrill (Flacourtiaceae). Throughout the summer, especially during August, males and females of *Z. eurydice* were commonly seen in westward flight which took them over or around the hedge of xylosma. One day the hedge was trimmed to shape by gardeners and the clippings were left on the ground next to it. During the next two weeks or so after the trimming, individuals of both sexes of *Z. eurydice* would approach the hedge in their normal manner, but once within about one meter from the shrub they would drop down to alight on the clippings. None were noticed to extend their proboscis or move any part of their body; they remained motionless with wings folded as if basking in some welcome scent. If allowed to remain undisturbed, the butterflies would return to flight after about 3 minutes with no apparent effects. Attempts to approach the butterflies startled them and they took flight. No less than eight individuals displaying the behavior were counted and recorded; others were casually noticed, but were neither recorded nor captured. This behavior ended about two weeks after the hedge was trimmed, possibly because of evaporation or decomposition of compounds within the xylosma clippings.

The cause of such behavior is a mystery, but perhaps involves attractance to chemical compounds within the plant; xylosma gives off a characteristic odor especially after it has been trimmed. Two other reported attractants for *Z. eurydice* are purple flowers (Emmel, T.C. & J.F. Emmel, 1973, The butterflies of southern California, Natural History Museum of Los Angeles County, Science Series 26: 1-148. See page 20) and fresh horse manure (Garth, J.S. & J.W. Tilden, 1986, California butterflies, California Natural History Guides: 51, U.C. Press, Berkeley. See page 110). Once isolated, the chemical(s) in *Xylosma* might prove to be a worthwhile attractant for *Z. eurydice*; more reliable than finding purple flowers and less offensive than horse manure!

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